



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-0013; Directorate Identifier 2010-SW-043-AD;**

**Amendment 39-17090; AD 2012-12-10]**

**RIN 2120-AA64**

**Airworthiness Directives; Agusta S.p.A. Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Agusta S.p.A.

(Agusta) Model AB139 and AW139 helicopters with a certain generator control unit

(GCU), to require replacing each affected GCU with an airworthy GCU. This AD was

prompted by laboratory tests which revealed a potential fault in the overvoltage

protection on a certain part-numbered GCU. The actions are intended to prevent failure of

the overvoltage protection of the GCU, degraded performance of the electrical power

generation and distribution systems, a fire, and subsequent loss of control of the

helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a

certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**EXAMINING THE AD DOCKET:** You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Mark Wiley, Aerospace Engineer, FAA, Regulations and Policy Group, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5134; fax (817) 222-5961; email [mark.wiley@faa.gov](mailto:mark.wiley@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On January 20, 2012, at 77 FR 2926, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to Agusta Model AB139 and AW139 helicopters, with a GCU, part-

number (P/N) 1152550-3, installed. That NPRM proposed to require, within 6 months, removing the No. 1 and No.2 GCU, P/N 1152550-3, modifying the electrical connectors A13P1 and A14P1 by installing wiring to the power distribution panel, and installing a No. 1 and No. 2 GCU with P/N 1152550-4 or 1152550-5. Both GCUs must have identical P/Ns on the same helicopter. The proposed requirements were intended to prevent failure of the overvoltage protection of the GCU, degraded performance of the electrical power generation and distribution systems, a fire, and subsequent loss of control of the helicopter.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2009-0042, dated February 25, 2009 (AD 2009-0042), to correct an unsafe condition for the Agusta Model AB139 and AW139 helicopters, all serial numbers (S/Ns) except S/Ns 31002, 31003, 31004, and 31007. EASA advises that laboratory tests performed on a new GCU model under development have shown a potential fault in the overvoltage protection of currently installed GCUs, P/N 1152550-3. EASA also advises that this condition, if not corrected, could adversely affect the helicopter's electrical power generation and distribution system functionalities.

### **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

### **FAA's Determination**

These helicopters have been approved by the aviation authority of Italy and are approved for operation in the United States. Pursuant to our bilateral agreement with

Italy, the EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by the EASA and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs. We have determined that air safety and the public interest require adopting the AD requirements as proposed, except for a typographical correction in the Related Service Information paragraph of the NPRM, which referred to the EASA AD as “2009-0048” instead of “2009-0042.” This change is consistent with the intent of the proposals in the NPRM and will not increase the economic burden on any operator nor increase the scope of the AD.

#### **Differences Between this AD and the EASA AD**

The EASA AD does not apply to certain serial-numbered Model AB139 and AW139 helicopters, whereas this AD applies to all serial-numbered Model AB139 and AW139 helicopters.

#### **Related Service Information**

Agusta S.p.A. issued Mandatory Bollettino Tecnico No. 139-133, Rev. A, dated March 17, 2009 (BT), for Model AB139 and AW139 helicopters, S/Ns 31005 up to S/N 31143, except for S/Ns 31007, 31037, 31038, 31094; S/N 31112; S/Ns 31146 up to S/N 31148; S/N 31155; S/Ns 31201 up to S/N 31218; and S/Ns 41001 up to S/N 41022, except S/N 41007; with a GCU, P/N 1152550-3. This BT specifies, within 6 months from receipt of the BT, removing GCU, P/N 1152550-3, modifying electrical connector A13P1 and A14P1, and replacing each GCU with an airworthy GCU, P/N 1152550-4 or 1152550-5, to improve electrical power generation and distribution system

functionalities. EASA classified this BT as mandatory and issued AD 2009-0042 to ensure the continued airworthiness of these helicopters.

### **Costs of Compliance**

We estimate that this AD will affect 72 helicopters of U.S. Registry.

We estimate that operators may incur the following costs in order to comply with this AD. We estimate that it will take about 4 work-hours to perform the required actions of this AD per helicopter at an average labor rate of \$85 per work-hour, and required parts will cost about \$42,384 per helicopter. Based on these figures, we estimate the cost to be \$42,724 per helicopter and the total cost impact of the AD for U.S. operators to be \$3,076,128.

According to the Agusta service information some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Agusta. Accordingly, we have included all costs in our cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-12-10 **AGUSTA S.p.A. HELICOPTERS:** Amendment 39-17090;

Docket No. FAA-2012-0013; Directorate Identifier 2010-SW-043-AD.

#### **(a) Applicability.**

This AD applies to Agusta S.p.A. (Agusta) Model AB139 and AW139 helicopters, with a generator control unit (GCU), part-number (P/N) 1152550-3 installed; certificated in any category.

#### **(b) Unsafe Condition.**

This AD defines the unsafe condition as a potential fault in the overvoltage protection in GCUs currently installed on Model AB139 and AW139 helicopters. This condition could result in failure of the overvoltage protection of the GCU, degraded performance of the electrical power generation and distribution systems, or fire, and subsequent loss of control of the helicopter.

#### **(c) Effective Date.**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions.**

(1) Remove the No. 1 and No. 2 GCU, P/N 1152550-3. Do not install GCU, P/N 1152550-3, on any helicopter.

(2) Modify the electrical connector A13P1 (GCU No. 1) and A14P1 (GCU No. 2) by installing the wiring to the power distribution panel (PDP) for your serial-numbered helicopter as depicted in Figure 1 of Agusta Bollettino Tecnico No. 139-133, Rev. A, dated March 17, 2009.

(3) Using either GCU P/N 1152550-4 or GCU P/N 1152550-5, install a No. 1 and No. 2 GCU that has the same part number. Having different part-numbered GCUs on the same helicopter is not approved.

**(f) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Mark Wiley, Aerospace Engineer, FAA, Regulations and Policy Group, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5134; fax (817) 222-5961; email [mark.wiley@faa.gov](mailto:mark.wiley@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information.**

The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2009-0042, dated February 25, 2009.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 2430, DC generating system.

**(i) Material Incorporated by Reference.**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Agusta Bollettino Tecnico No. 139-133, Rev. A, dated March 17, 2009.

(4) For service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39- 0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bulletins>.

(5) You may review a copy of the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137 or at the National Archives and Records Administration

(NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html)

Issued in Fort Worth, Texas, on June 8, 2012.

Kim Smith,

Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-14797 Filed 06/22/2012 at 8:45 am; Publication Date: 06/25/2012]